3-292-509-**12** (1)

SONY® WALKMAN®

VRC-NW10

Video Recording Cradle

Operating Instructions

Table of Contents

Recorded data content limited to private use only. Use of content beyond this limit requires permission of the copyright holders, and unauthorized recording of content may be contrary to copyright laws.

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet.
Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

Notice for customers: the following information is only applicable to equipment sold in countries applying EU directives
The manufacturer of this product is Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

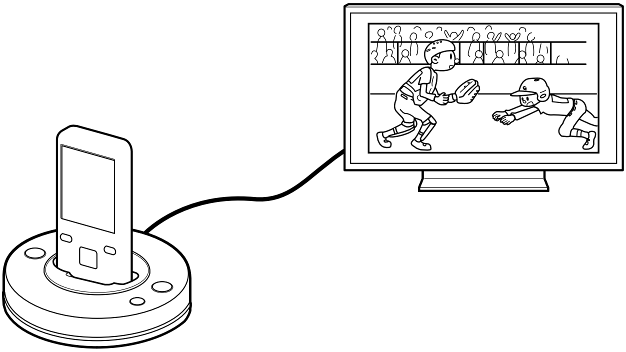
Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the
applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help
prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product

- Contents of the recording cannot be compensated for if the recording or playback is not made due to a malfunction of the recorder, disc, etc.
- In no event shall Sony Corporation or its Affiliates be liable for any pecuniary loss, passive damages, liabilities, or claims from bystanders pertaining to any property you develop that is based on, or derived from this product.
- Make trial recordings before making the actual recording.

Features

This device is a video recording cradle that enables direct recording from AV component, such as a TV, HDD recorder, or camcorder to a "WALKMAN."
After connecting to the video output of an AV component, set your "WALKMAN" on the cradle, and press the REC button to record a video.



The device features the following:
- You can record a current TV programme to a "WALKMAN"
- You can perform timer recording, with an interactive TV programme guide*
- Timer recording–Stop time Setting is available.
- A choice of 3 bit rates (video picture quality)
- Useful simultaneous power recharging of the "WALKMAN" during video recording
- Easy steps for deleting video files recorded with this device onto a "WALKMAN"
- Wide screen size (16 : 9) recording supported

* For details, refer to the instruction manual supplied with your TV.
Depending on your TV model, the timer recording using the EPG (Electric Programme Guide) may not be available.

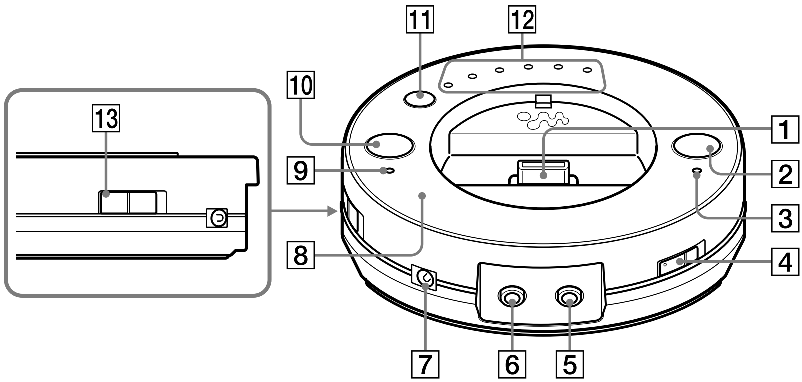
Supported recordable "WALKMAN" using this cradle

This device supports "WALKMAN" models capable of video playback.

Tip

For details on applicable "WALKMAN," visit:
http://support.sony-europe.com/dna/accessories

Parts and Controls



1 WM-PORT
Connects to the attachment supplied with your "WALKMAN" (Page 7).

2 DELETE button
Deletes video files recorded with this device (Page 14).

3 DELETE indicator
Blinks while deleting a recorded video file (Page 14).

4 REC MODE switch
When set, changes the picture quality level for recording. 3 levels are available: H/M/L (Page 9).

5 VIDEO IN jack
For connecting the AV cable (supplied). Connect the other end of the AV cable to video output jack of your TV, etc. (Page 6)

6 AUDIO IN jack
For connecting the AV cable (supplied). Connect the other end of the AV cable to audio output jack of your TV, etc. (Page 6)

7 DC IN jack
For connecting the AC power adaptor (supplied) (Page 6).

8 POWER indicator
Lights up while the power is ON (Page 8).

9 REC indicator
Lights up while recording (Page 9).

10 REC/STOP button
Starts or Stops recording (Page 9).

11 OFF TIMER button
Sets the OFF timer counter (Page 12).

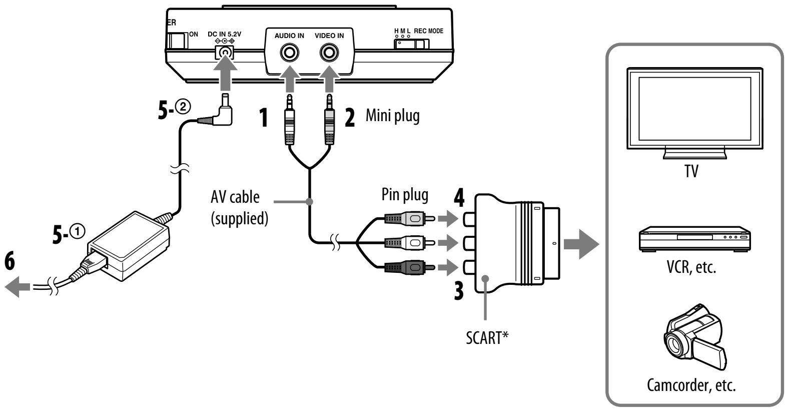
12 Timer indicators
Lights up to indicate the OFF TIMER increments (Page 12).

13 POWER switch
When slid, turns On/Off the power (Page 8).

Connecting

Connecting to an AV component

Connect the device to AV component, such as TV, using the supplied AV cable.



1 Connect the mini plug (black) of the AV cable to the AUDIO IN jack of this device.

2 Connect the mini plug (yellow) of the AV cable to the VIDEO IN jack of this device.

3 Connect the pin plugs (white and red) of the AV cable to the AUDIO OUT jack of the AV component.

4 Connect the pin plug (yellow) of the AV cable to the VIDEO OUT jack of the AV component.

5 Connect the AC cord (mains lead) to the AC power adaptor ①, and connect the AC power adaptor to the DC IN jack of this device ②.

6 Plug the AC cord into the mains.

Tip

For details such as the jack positions of AV component, refer to the instruction manual supplied with the AV component. Depending on the connected AV component, an optional cable or connector, such as SCART (supplied) may be required to connect to this device.

Note

When connecting with the included SCART, make sure that the jack position switch is set to OUTPUT.

* This supplied accessory is required depending on the situation.

Setting on and charging the “WALKMAN”

After the connection completed, set “WALKMAN” onto this device.

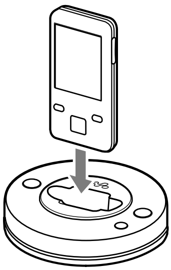
1 Fit the attachment* supplied with the “WALKMAN.”

When using with this device, be sure to fit the attachment supplied with the “WALKMAN.” To install the attachment, fit the two tabs near the logo into the holes on the cradle first, and push the opposite side down into the cradle.

* The shape of the attachment may be different, depending on your the “WALKMAN” model.

2 Set on the “WALKMAN.”

Set the “WALKMAN” onto the attachment firmly.

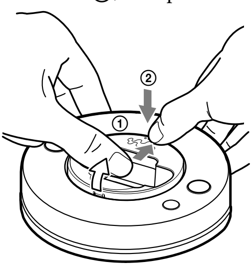


Charging starts.
This device can be used also as the charging cradle of “WALKMAN.” The “WALKMAN” will be charged, even when power is off.

Charging time will vary depending on model. For details, refer to the Operation Guide supplied with your “WALKMAN.”

Tip

To remove the attachment, push strongly the concave part of attachment toward the rear of the cradle ①, then push strongly the area indicated by the mark (ooo) from above ②.



Note

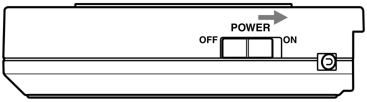
- Do not use a “WALKMAN” that is not compatible with this device. This device only supports “WALKMAN” models capable of video playback.

Turning On/Off the Power

After connection and setting is completed, turn on the device.

Turning on the power

1 Slide the POWER switch to ON.



The POWER indicator blinks slowly.
When the POWER indicator lights up green, the power turns on.
The REC indicator starts blinking quickly, and then slows down. If “WALKMAN” is not set, the REC indicator will not blink.

Note

After setting the “WALKMAN” in the cradle, it may take the device some time to prepare for use, as the process to create folders for recording in the “WALKMAN” memory, or calculating memory free space is carried out. The preparation time will be longer if the number of video files stored is large. Do not remove the “WALKMAN” during the REC indicator blinking quickly.

To turn off the power

1 Slide the POWER switch to OFF.

The POWER indicator goes off.

Recording

Recording the current programme you are watching

You can record the programme you are watching on your "WALKMAN."

1 Connect this device to the TV using the AV cable (page 6), and set the "WALKMAN" on the cradle (page 7).

2 Slide the POWER switch to ON (page 8).

The POWER indicator lights up green and the REC indicator blinks slowly.

3 Turn on the TV and select the channel of the programme you want to record.

Confirm the setting that allows the TV to output the appropriate signal.
Depending on your TV model, the video signal may not output other than during recording, when SMARTLINK feature is used as the record setting. (The SMARTLIINK feature is a direct link between the TV and recorder. The name of this function differs depending on the TV manufacturer.)

4 Set the recording mode by sliding the REC MODE switch.

About the recording mode setting

You can select the bit rate*, H, M, or L.
You can change the recording mode, depending on the free space in memory.

- H: 768 kbps Higher quality picture mode; the file size will be large.
- M: 512 kbps
- L: 256 kbps Lower quality picture mode; the file size will be smaller.

* What is bit rate?
Bit rate refers to the amount of data stored for each second of video, and indicated as, for example, 64 kbps (kilobits per second). Generally, higher bit rates provide better picture quality, but require more storage space for the same length of video.

5 Press the REC/STOP button of the device.

The REC indicator lights up in red, and recording starts approx. 3 seconds later.
Maximum available recording time may differ, depending on the "WALKMAN" model. For details, refer to the Operation Guide supplied with the "WALKMAN."

6 Press the REC/STOP button on the device to stop recording.

The REC indicator starts blinking quickly, and then slows down.
The recording is completed.

Continued

7 Remove the "WALKMAN" from the device.

Remove after confirming the "WALKMAN" display message changing, from "Do not disconnect" to "Connecting."

Tips

- The largest file size recordable on is approx. 1.7 GB.
  The maximum recordable time for each recording mode is estimated as follows; and a recording will be stopped automatically beyond the maximum time.
  H: 768 kbps, approx. 4 hours
  M: 512 kbps, approx. 6 hours
  L: 256 kbps, approx. 10 hours
- The maximum number of files is 1,000*1.
- Files are managed according to file name as "VRCxxxx.MP4" (xxxx is a variable from 0001 to 1000).

*1 You can store up to 1,000 video files in a "WALKMAN," including those transferred from a computer.

Notes

- If the REC indicator blinks once for approx. 2 seconds, confirm the connection between the TV and this device. Recording will not start without transmission of the video signal.
- When removing the "WALKMAN," confirm that recording has ended, and the REC indicator blinks slowly.
- Do not remove the "WALKMAN" during the REC indicator is blinking fast.
- While a "WALKMAN" is set onto this device, controls on the "WALKMAN" do not work.
- Recording is automatically cancelled at the point if there is no free space in memory during the recording.
- If the "WALKMAN" becomes disconnected from the device during recording, recording will be cancelled and all indicators will blink to indicate an error, and recorded data may be lost, or unplayable video files may be recorded.*2 Be sure to set the "WALKMAN" firmly onto this device.
- If you press the REC/STOP button to stop recording immediately after starting, unplayable video files may be recorded.*2
- The recording mode cannot be changed with the REC MODE switch during recording. Set the desired recording mode before recording.
- Pictures containing Macrovision signals cannot be recorded.*3

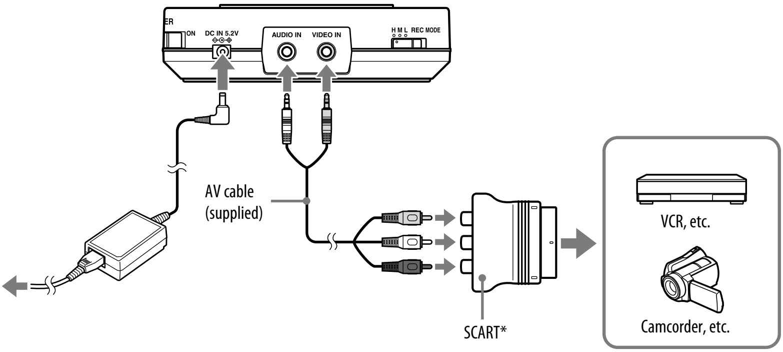
*2 If unplayable video files are recorded, connect the "WALKMAN" to a computer, and delete the files using Windows Explorer.

*3 Macrovision signal is a protected signal using copyright protection technology developed by Macrovision Corporation, to protect the contents from unauthorized copying when transmitting.

Recording from a VCR or similar AV component

You can record the videos in your VCR or camcorder on "WALKMAN."

1 Connect this device to the TV using the AV cable (page 6), and set the "WALKMAN" in the device (page 7).



2 Slide the POWER switch to ON (page 8).

The POWER indicator lights up green and the REC indicator blinks slowly.

3 Turn on the AV component.

4 Set the recording mode by sliding the REC MODE switch.

For details, refer to "About the recording mode setting" in step 4, on page 9.

5 Press the REC/STOP button on the device.

The REC indicator lights up in red, and recording starts approx. 3 seconds later.

6 Start playback of the AV component.

For details, refer to the instruction manual supplied with your AV component.
It takes the device approx. 3 seconds to start recording on the "WALKMAN" after the REC button is pressed. Confirm the REC indicator is lit and start playback of the AV component after approx. 3 seconds.
If playback the AV component is performed immediately after the REC indicator has lit, the beginning of the programme will not be recorded.

7 Press the REC/STOP button on the device to stop recording.

The REC indicator starts blinking quickly, and then slows down.
Recording is completed.

Note

The point 3 seconds after the REC/STOP button is pressed to the moment playback of the AV component starts will also be recorded.

* This supplied accessory is required depending on the situation.

Using the OFF TIMER function

You can set the duration of the OFF TIMER function incrementally.

1 Set the recording mode and a programme or video to record, by referring to steps 1-4 on page 9 or 11.

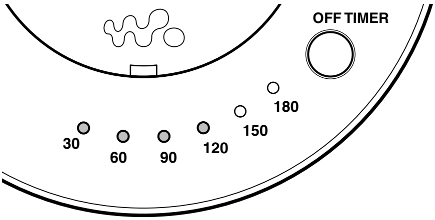
2 Press the OFF TIMER button to set the duration.

The OFF timer can be set between 30 minutes and 180 minutes, in 30-minute increments by each press of the OFF TIMER button.

→ 30 → 60 → 90 → 120 → 150 → 180 → OFF

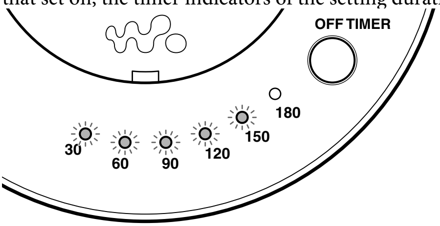
When 120-minute timer is set

The timer indicators from 30 to 120 light up.



If a 150-minute timer duration is set but cannot be completed

If free space in memory of the "WALKMAN" is not enough to complete a record duration that set on, the timer indicators of the setting duration will blink.



3 Press the REC/STOP button on the device.

The REC indicator lights up in red and recording starts.

During the recording, the timer indicators are extinguished one-by-one according to the remaining time.

When the timer recording ends successfully, the REC indicator starts blinking quickly, and then slows down.

Tip

Even when the timer is set, a recording is stopped at the point if the power of the AV component is turned off and the transmission of the signals ends. Video files are created accordingly.

Timer recording with a TV programme guide

Depending on your TV model, the timer recording can be based on the information provided by the EPG (Electric Programme Guide) in the display on your TV.
After a timer recording on the TV is set, the recording will be automatically started even if the power of the TV is off.

1. Prepare this device and the TV for recording by referring to steps 1-2, on page 9.

2. Set the recording mode by referring to step 4 on page 9.

3. Select the programme you want to record.

   Refer to the instruction manual supplied with the TV.

4. Turn the TV off.

   Be sure not to turn off the TV using the main POWER switch on the TV unit.
   If the main power is turned off, TV power will not be successfully turned on again and the recording will not be started.

5. Press the REC/STOP button on the device.

   The REC indicator starts blinking approx. once every 2 seconds.
   Even though the power of the TV is turned off, the recording will be started and stopped automatically, according to the TV programme guide information.

Notes

- If the “WALKMAN” becomes disconnected this device during the timer setting, the timer recording will be cancelled.
- The device requires approx. 3 seconds to start recording on the “WALKMAN,” from the time the device receives a video signal.
- Standard digital broadcasts, satellite broadcasts, and communication broadcasting satellite channels can be recorded using EPG.

Additional Information

Playing back recorded programmes on the “WALKMAN”

Files recorded using this device are stored in “VRC” folder under “VIDEO” in the “WALKMAN.” When the “WALKMAN” is connected to a computer, these files are displayed with names such as “VRCxxxx.MP4,” etc.
On the “WALKMAN” display, a file is displayed with a file name “VRCxxxx”(xxxx is a variable from 0001 to 1000.)
For details of how to playing back video, refer to the Operation Guide supplied with the “WALKMAN.”

Note

If the width of recorded widescreen (16: 9) picture is constricted on the display, set the ratio of the picture output from your AV component to 4:3, then record.
If the picture output ratio remains set to 16:9, picture width will be constricted in the recording.

Deleting recorded programmes

You can also delete video files recorded using this device.

1. Set the “WALKMAN” in this device (page 7).
2. Slide the POWER switch to ON (page 8).
3. Press and hold the DELETE button for approx. 2 seconds.
   The oldest video file that was recorded using the device is deleted.
   While deleting a file, the DELETE indicator blinks quickly.
   When the indicator goes off, file deletion is completed.

Notes

- Pressing the DELETE button once deletes one file.
- The files order to be deleted is from the oldest recorded date and time. To store the file that you do not want to delete, transfer the file into storage, such as in memory of computer, using Windows Explorer after connecting “WALKMAN” to a computer. The “WALKMAN” is displayed on Explorer as “WALKMAN” or “Removable Disk.”
- When recording, this device uses the clock setting on the “WALKMAN” to stamp the time. Determine the accuracy of the “WALKMAN” clock before recording. For details of how to set the time, refer to the Operation Guide supplied with the “WALKMAN.”
  Some “WALKMAN” series models do not support internal clock systems for timer recording.
  For details about “WALKMAN” models with clocks not supporting timer recording, visit:
  http://support.sony-europe.com/dna/accessories

If the device cannot recognize the internal clock system of a connected "WALKMAN," the device starts counting from the 0:00 am, January 1, 2008 to the end of the duration set after being turned on. The cradle does not have a time adjustment function.
If the power is turned off once, the next recording will also start from 0:00 am, January 1, 2008. Therefore the recorded file order will not be listed accurately.
When you delete a video file taken by this device by pressing the DELETE button, the file listed at the very bottom of the Video Library of the "WALKMAN" display will be deleted.
If the device cannot recognize the internal clock system, there is no guarantee that the file displayed at the very bottom is the oldest video file that is to be erased first by this delete function. Make sure necessary file is not listed at the very bottom on the Video Library of the "WALKMAN" display before deleting.

- Video files transferred from a computer using Media Manager cannot be deleted, even files recorded with this device.

Tips

- Video files that are recorded other than using this device cannot be deleted using the DELETE button of the device.
- You can delete video files directly from your "WALKMAN," depending on the "WALKMAN" model.
- You can copy video files to a computer using Media Manager.

Overview of the indicators of this device

Indicator Status	Descriptions
POWER indicator is steadily lit	The power is on.
POWER indicator blinks slowly (Green)	The power is on and the device is in preparation.
POWER indicator off	The power is off.
REC indicator blinks quickly	The device is writing/reading data onto/from the "WALKMAN." Do not remove the "WALKMAN" from the device while the indicator is blinking quickly.
REC indicator blinks slowly	A"WALKMAN" is set on the device, and is ready for recording.
REC indicator blinks once every approx. 2 seconds	There is no video signal input to the device. After receiving video signals, the device starts recording.
REC indicator is steadily lit (red)	Recording is in progress.
DELETE indicator blinks (red)	The device is deleting a recorded video file.
Timer indicators are steadily lit (red)	One of the indicators display 30-minute increment of recordable duration, from 30 to 180 minutes (6 increments).
Timer indicator blinking (red)	There is insufficient in free memory to complete the recording. The indicators of the applicable duration blink.
All timer indicators blinking (red)	An error has occurred (see below).
30 and 180 minute timer indicators blinking (red)	An error has occurred as a result of Macrovision copyright protection (see below).

About errors

The indicators on this device will notify of error conditions as follows:

- If a button is pressed without setting a "WALKMAN" on the device.
- If the "WALKMAN" becomes disconnected from this device during the recording.
- If the "WALKMAN" does not have enough free space in memory (→see page 18).
- If the number of video files has reached the maximum (→see page 18).
- When a delete operation is made but there are no video files recorded using this device.
- If video signals are protected by Macrovision copyright protection, or video signals are switched to those includes Macrovision signals (→see page 18).

If an error has occured

- To clear error indications, press the OFF TIMER button, REC/STOP button or DELETE button.
- If an error occurs as a result of a "WALKMAN" not being set on this device, first clear the indications.
  Without clearing error indications, the device will not recognize the "WALKMAN."

Precautions

On Installation

Do not use/store the device in the following places as malfunction may result.

- In an extremely hot place
  Never leave the device exposed to high temperature, such as in a car parked in the sun.
- Under direct sunlight or near a heater
  The device may become discolored, distorted or damaged.
- In a location subject to rocking, vibration or instability
- Near strong magnetic place
- In sandy or dusty places
  Be careful not to let sand or dust get into the device. This may cause the device to malfunction, and in some cases this malfunction cannot be repaired.
- In a location subject to rocking, vibration or instability.
  Do not set the device on an unstable surface as it may fall, causing injury or damage.
- Do not install the AC power adaptor in a confined space, such as a bookcase or built-in cabinet.
- To reduce the risk of fire or electric shock, do not expose the AC power adaptor to dripping or splashing, and do not place objects filled with liquids, such as vases, on the AC power adaptor.

On use

- Do not subject the device to strong shock, or drop it.
- Be sure that nothing metallic comes into contact with the metal parts of AC power adaptor and cords as a short circuit may occur and the device may be damaged.
- Do not connect the AC power adaptor to an electrical transformer for travel use. The AC power adapter may become excessively hot and malfunction may result.
- As the mains plug is used to disconnect the device from the mains, connect the device to an easily accessible AC outlet (mains). Should you notice an abnormality in the device, disconnect the mains plug from the AC outlet (mains) immediately.

On cleaning

- Clean the device with a soft, dry cloth. If the device becomes extremely dirty, clean with a soft cloth lightly moistened with a mild detergent solution.
- Do not use any type of solvent, such as alcohol or benzine, which may damage the finish.
- When using a chemically-treated dust cloth, refer to the instructions with the product.
- Do not spray volatile chemicals such as insecticide on the device, or do not leave the device in contact with rubber or vinyl for a long time. The device may become distorted or damaged.

Troubleshooting

If the cradle does not function as expected, remove the “WALKMAN” from the device. Turn off the power of the device, wait for a while, connect the “WALKMAN” and turn it on again.
Also check for symptoms in the troubleshooting tables below.
If the problem persists, consult the nearest Sony dealer or Customer Information Service Center (on the back cover).

Symptom	Cause/Remedy
The device will not turn on. (Or immediately shut off after turning on.)	• Confirm the POWER switch is set to ON. • Confirm the AC power adaptor and the AC power cord are correctly connected (page 6).
Recording does not start.	• Confirm your “WALKMAN” model is supported by this device (page 7). • There is not enough free space in the “WALKMAN” memory. → Delete any unnecessary data using the device or your computer. • Video you want to record includes Macrovision signals. → The device cannot record video content that contains Macrovision copyright protection signals. • The number of video files has reached the maximum limit. → The maximum limit recordable using this device is 1,000 files. You can store up to 1000 video files into a “WALKMAN,” including those transferred from a computer. • Video signals are not output from AV component. → Video/audio signals may not be output if AV component such as an HDD/DVD recorder is connected via the HDMI connector to your TV and you want to record the programme in the AV component that is currently being played back on the TV display. Refer to the instruction manual supplied with your TV, and change the video/audio input setting to restore signal output from the TV for recording. • Confirm the jack position switch of SCART is set to OUTPUT.
Timer recording is stopped midway.	• If there is no free space in the “WALKMAN” memory , the device will stop recording. → Video files are created up to the moment recording is stopped. • If the AV cable becomes disconnected from the device and video input failure occurs during recording, the device stops recording. → Video files are created up to the moment recording is stopped. • If video file size reaches the limit of approx. 1.7 GB, the device stops recording.
The connected AV cable becomes disconnected.	• If an input failure of the video signals occurs, the device stops recording.

Symptom	Cause/Remedy
The timer indicators seem to display an error during recording	• In the following case, the timer indicators blink to notify of an error. – "WALKMAN" becomes disconnected from this device during recording. The recording is cancelled and a video file is not recorded. – Video signals are switched to those includes Macrovision signals at the beginning of or during the recording (30 and 180 timer indicators blink.) – The OFF TIMER button, or REC/STOP button is pressed when there is no free space in "WALKMAN" memory. – The OFF TIMER button, or REC/STOP button is pressed when the number of video files has reached the maximum limit (1,000).
The "WALKMAN" battery cannot be charged	• Set the "WALKMAN" firmly onto this device.
Timer recording using EPG cannot be completed.	• The main power of your TV is turned off. → Turn on the main power of your TV. • Your TV does not allow recording using EPG .
Recorded video files appear to have been lost.	• If the memory of the "WALKMAN" is formatted, all data and settings will be erased. • A delete operation will erase the oldest video file which was recorded by this device.
Cannot find recorded files.	• Files recorded using this device are stored in the "VRC" folder under "VIDEO" in the "WALKMAN." When the "WALKMAN" is connected to a computer, these files are displayed with file names such as "VRCxxxx.MP4." In the "WALKMAN" display, these files are displayed with file names such as "VRCxxxx." (xxxx is a variable from 0001 to 1000.)

Specifications

Terminals

WM-PORT* connector (22 pin) (For Walkman)

* The WM-PORT is a dedicated multi-terminal connector, used to connect a "WALKMAN" to its accessories.

AUDIO IN
VIDEO IN
DC IN 5.2V

Supported video codec

Video : AVC (H.264/AVC)
QVGA (320 × 240) Baseline Profile
3 picture quality modes (H:768/M:512/L:256kbps)
Frame rate 30fps
With 768kbps, Approx. 2hours 30minutes for 1GB
With 512kbps, Approx. 3hours 30minutes for 1GB
With 256kbps, Approx. 5hours 30minutes for 1GB
Audio : AAC-LC 48kHz sampling frequency rates, with 128kbps (fixed)

Operating temperature

5-35˚C

Dimensions:

Approx. 100×25mm (Diameter/Width, including protrusions)

Mass:

Approx. 138g

Supplied accessories:

- AV cable
- AC power adaptor
- AC cord
- SCART
- Operating Instructions (this manual)
- Warranty

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